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REMARKS

Claims 8, 10, 57, 58 and 61-67 were pending in the application. New claims 68-81 have been added. Claims 6, 57, 58, 61, and 62 have been amended and claims 8, 66 and 67 have been cancelled. Accordingly, after the amendments presented herein have been entered, claims 10, 57, 58, 61-65, and 68-81 will remain pending.

Support for the new claims and the amendments to the claims can be found throughout the specification and in the claims as originally filed. Specifically, the amendments to claims 57, 58, 61 and 62 were done to correct a grammatical error. Support for claims 68 and 69 can be found in claim 10 as previously pending. Support for new claims 70-81 can be found in claims 57, 58, 61 and 62 as previously pending.

No new matter has been added. Any cancellation of the claims should in no way be construed as an acquiescence to any of the Examiner's rejections and was done solely to expedite the prosecution of the application. Applicants reserve the right to pursue the claims as originally filed in this or a separate application(s).

Acknowledgement of the Withdrawal of Certain Rejections and the Indication of Certain Claims as Allowable

Applicants gratefully acknowledge the withdrawal of the previous rejections under 35 U.S.C.§ 112, first paragraph.

Applicants further gratefully acknowledge the indication of claims 57, 58, and 61-64 as being allowable.

Rejection of Claims 8, 10, and 65-67 Under 35 U.S.C.§ 112, First Paragraph

The Examiner has rejected claims 8, 10, and 65-67 under 35 U.S.C. §112, first paragraph because, according to the Examiner, "the specification, while being enabling for an amino acid of SEQ ID NO: 20, does not reasonably provide enablement for an amino acid sequence comprises at least 15 contiguous amino acids of SEQ ID NO: 20 or a polypeptide comprising 15 amino acids of SEQ ID NO: 20, comprising a calcium binding domain."

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Applicants traverse this rejection.

Applicants believe that the Examiner has mistakenly applied the foregoing rejection to claim 65. Claim 65 is directed to an isolated polypeptide encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number 98991, or 98993. This claim is not directed to fragments of SEQ ID NO:20. Applicants respectfully request the Examiner reconsider and withdraw the foregoing rejection as it applies to this claim.

While in no way conceding the validity of the Examiner's rejection and solely in the interest of expediting prosecution, Applicants have cancelled claims 8, 10, 66 and 67 thereby rendering the foregoing rejection moot. In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the foregoing rejection.

Rejection of Claims 8, 10, and 65-67 Under 35 U.S.C.§ 112, First Paragraph

The Examiner has rejected claims 8, 10, and 65-67 under 35 U.S.C. §112, first paragraph as, "containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention." Specifically, the Examiner states, "[t]hese are genus claims. The claims are drawn to amino acid sequences which comprise[s] at least 15 contiguous amino acids of SEQ ID NO: 20."

Applicants traverse this rejection.

Applicants believe that the Examiner has mistakenly applied the foregoing rejection to claim 65. As indicated above, Claim 65 is directed to an isolated polypeptide encoded by the DNA insert of the plasmid deposited with ATCC as Accession Number 98991, or 98993. This claim is not directed to fragments of SEQ ID NO:20. Applicants respectfully request the Examiner reconsider and withdraw the foregoing rejection as it applies to this claim.

While in no way conceding the validity of the Examiner's rejection and solely in the interest of expediting prosecution, Applicants have cancelled claims 8, 10, 66 and 67 thereby rendering the foregoing rejection moot. In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the foregoing rejection.

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Rejection of Claim 65 Under 35 U.S.C.§ 112, First Paragraph

The Examiner has rejected claim 65 under 35 U.S.C.§ 112, first paragraph "as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention." Specifically, the Examiner states that

Applicants have not provided a declaration providing the following: i) a statement all restrictions on the availability to the public of the deposited material so deposited will be irrevocably removed up on the granting of the patent. ii) a statement that the material has been deposited under conditions that assure that access to the material will be available during the pendancy of the patent application to one determined by the Commissioner to be entitled thereto under 37 C.F.R. 1.14 and 35 U.S.C. 112. iii) A statement that the deposited material will be maintained with all the care necessary to keep it viable and uncontaminated for a period of at least five years after the most recent request of the furnishing of a sample of the deposited microorganism, and in any case, for a period of at least thirty years after the date of deposit or for the enforceable life of the patent, whichever period is longer. iv) A statement by the declarant that all statements are true and that all statements made on information and belief are believed to be true; and further that these statements were made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the instant patent application or any patent issuing thereon.

Applicants traverse this rejection for at least the following reasons.

MPEP § 2410.01 states that, "the mere indication that a deposit has been made under conditions prescribed by the Budapest Treaty would satisfy all conditions of the regulations except the requirement that all restrictions on access be removed on the grant of the patent (Exparte Hildebrand, 15 USPQ2d 1662 (Bd. Pat. App. Int. 1990)."

Applicants' specification states that "the ATCC deposits referred to in Table 1, were deposited with American Type Culture Collection (ATCC), 10801 University Boulevard, Manassas, VA 20110-2209, on November 17, 1998," and further, "that these deposits will be maintained under the terms of the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure" (see page 31, lines 5-12 of the specification).

Moreover, Applicants have stated in the Amendment and Response filed on September 2, 2003, that

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[a]s required under 37 C.F.R. §1.804(b), the plasmids containing the full length nucleotide sequence encoding human 9qm and 9ql and deposited with the ATCC as Accession Numbers 98993 and 98991, respectively, are plasmids specifically identified in U.S. Serial No. 09/670,756. These deposits were made under the conditions of the Budapest Treaty and comply with the preservation and public disclosure requirements of M.P.E.P. § 608.01 (p) (C). In addition, Applicants state herein that the deposits will irrevocably and without restriction or condition be released to the public upon issuance of a patent.

As evidenced by the above, Applicants have stated that the deposits were made with the ATCC and will be maintained under the terms of the Budapest Treaty. Further, Applicants state in the Amendment and Response filed on September 2, 2003 that the deposits will be irrevocably and without restriction be released to the public upon issuance of a patent.

Accordingly, based on the statements in the specification as filed and the Amendment and Response filed on September 2, 2003, Applicants have satisfied the requirements as set forth in 2410.01 and, therefore, respectfully request that the Examiner reconsider and withdraw this rejection.

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SUMMARY

If a telephone conversation with Applicants' Attorney would expedite the prosecution of the above-identified application, the Examiner is urged to call the undersigned at (617) 227-7400.

Respectfully submitted,

onaman M. Sparts, Ph.D.

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Dated: April 13, 2004